ARCADIS U.S., Inc.
6723 Towpath Road
P O Box: 66
Syracuse
New York 13214-0066
Tel 315 446 9120
Fax 315 449 0017
www.arcadis-us.com

ENVIRONMENT

PCB Coordinator
U.S. EPA Region 5
Mailstop LU-9J
77 W. Jackson Blvd
Chicago, IL 60604

Subject:
GE Aviation – Altitude Test Facility
Data Summary of Ninth Air Sampling Event – April 2014

Date:
May 8, 2014

Dear PCB Coordinator:

On April 14, 2014, GE Aviation, an operating division of the General Electric Company (GE), performed indoor air testing activities at the Altitude Test Facility (ATF) at GE's facility in Evendale, Ohio, in accordance with EPA's January 16, 2014 amendment to EPA's December 19, 2012 approval allowing GE to use the ATF for jet engine testing pursuant to 40 CFR § 761.62(c). This report is being submitted pursuant to Consent Agreement and Final Order (TSCA-05-2014-0008) filed on April 28, 2014.

GE collected three indoor air samples at the ATF on April 14, 2014, following the conclusion of jet engine testing and received the laboratory report containing the results on April 28, 2014. Two samples were "Non-Detect" for PCBs, and the third sample had low (below the laboratory quantitation limit – PQL), but detectable results for PCBs, estimated at 32.6 nanograms per cubic meter (ng/m^3), well below the NIOSH standard of 1,000 ng/m^3. Further details for the sampling event follow in the report and **Table 1**.

Air test sample ATF-AR-C43-06, located adjacent to the #43 Test Cell Chamber of the ATF, while air test sample ATF-AR-C44-04, located adjacent to the #44 Test Cell Chamber of the ATF, and air test sample ATF-AR-CR2-09, located on the second floor of the compressor room, were all collected over an 8-hour interval. The samples were collected on April 14, 2014 during routine facility maintenance, following the completion of engine testing activities. All three air pumps were placed in a manner such that the air sample would be collected from the breathing zone, in the room where employees were performing work tasks. The three air pumps used for this event were programmed for a flow rate of 5.0 L/minute for a total run time of eight hours. Calibration and preparation of air samples followed Method TO-10A:

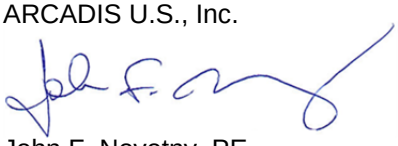
Compendium of Methods for Toxic Organic Air Pollution. During the sampling event, a total volume of 2,400 Liters was pumped through each sample collection media.

The laboratory analytical results of the sampling event are provided in the Data Summary Table, attached as Table 1 and the sampling locations are provided on the attached **Figure 1**. As indicated in the attachments, sample ATF-AR-C43-06 (collected adjacent to Test Cell #43) had "non-detect" levels of PCBs ng/m^3, sample ATF-AR-C44-04 (collected adjacent to Test Cell #44) had "non-detect" levels of PCBs ng/m^3, and sample ATF-AR-CR2-09 (collected from the ATF compressor room) had detected PCBs of 32.6 ng/m^3. This result is estimated (noted as "J" in the laboratory report) because the concentration is less than the PQL but greater than the method detection limit - MDL. The PQL for these results was 41.7 ng/m^3, with a final extraction volume of 5.0 mL. The specific operating parameters of the analytical instruments used by PACE Analytical during sample analysis are detailed in **Attachment 1**.

Please do not hesitate to contact John Rumpf, Counsel for Environmental Affairs at GE Aviation, at (513) 243-4256 or Christopher Bell at Greenberg Traurig LLP at (713) 374-3556 if you have any questions.

Sincerely,

ARCADIS U.S., Inc.



John F. Novotny, PE
Senior Engineer

Attachments
Table 1
Figure 1
Attachment 1

Copies:
John Rumpf, GE
Christopher Bell, Greenberg Traurig, LLP

ARCADIS

Table 1

Table 1
Data Summary - PCB Air Monitoring - April 2014

GE - Aviation - Altitude Test Facility
Cincinnati, Ohio

Sampling ID	Date Collected	Time Collected	Sample Type	Total PCBs (ng/m^3)	Location Description
Event 9					
ATF-AR-C43-06	4/14/2014	15:20	Air	ND	Test Cell 43 open floor area
ATF-AR-C44-04	4/14/2014	15:25	Air	ND	Test Cell 44 open floor area
ATF-AR-CR2-09	4/14/2014	15:30	Air	32.6	Second Floor of ATF Compressor Room

Notes:

1. Samples collected by ARCADIS personnel and submitted to Pace Analytical Laboratory for analysis using USEPA Compendium Method TO-10A procedures.
2. Air pumps were set up at breathing zone height and operated over an 8-hour interval at an air intake rate of 5 L/min, resulting in 2,400 L pumped through each sample media.
3. Event 9 took place at the ATF on April 14, 2014.
4. Total PCBs - the sum of aroclors 1016 through 1268.
5. The final extraction volume of 5.0 mL was conducted by the laboratory.
6. The initial injection volume of 1uL was conducted by the laboratory.
7. The laboratory determined no sample breakthrough occurred on all sample media.
8. ND (Non-Detect) - Denotes analyte not detected at a concentration greater than the PQL.
9. PQL (Practical Quantitation Limit) of 41.7 ng/m³ per aroclor. Denotes lowest analyte concentration reportable for the sample.
10. Time Collected, denotes the time which the air pumps completed the 8-hour run interval.

Abbreviations:

ATF - Altitude Test Facility
AR - PCB air sample
C43 - Test Cell #43
CR2 - compressor room-second floor
PCBs - polychlorinated biphenyls
ng/m^3 - nanograms per cubic meter

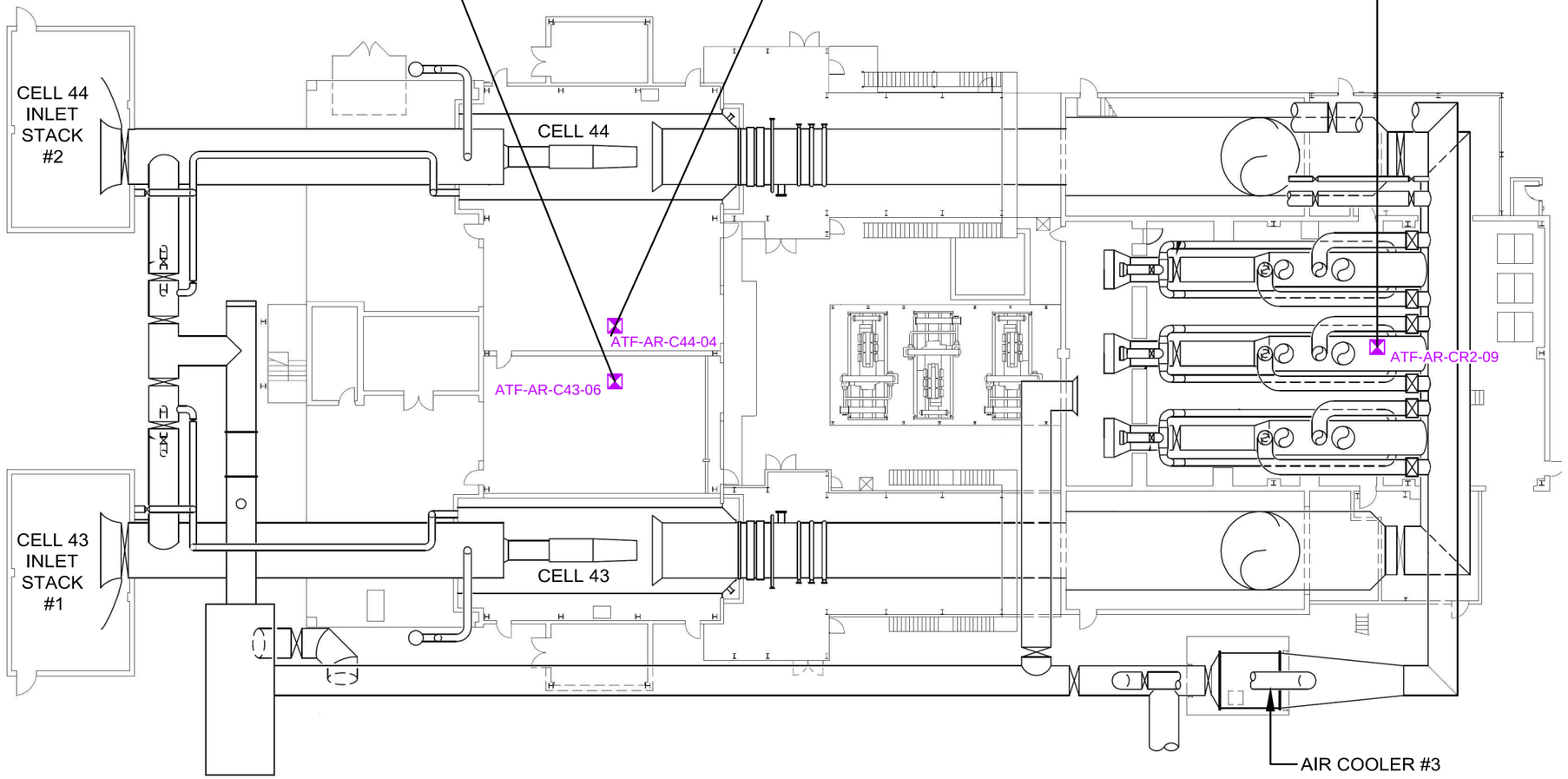
ARCADIS

Figure 1

ATF-AR-C43-06	
DATE	4/14/2014
TOTAL PCBs (ng/m³)	ND

ATF-AR-C44-04	
DATE	4/14/2014
TOTAL PCBs (ng/m³)	ND

ATF-AR-CR2-09	
DATE	4/14/2014
TOTAL PCBs (ng/m³)	32.6



NOT TO SCALE

LEGEND:

- AMBIENT PCB AIR MONITORING LOCATION

SAMPLING NOMENCLATURE:

ATF – ALTITUDE TEST FACILITY

AR – PCB AIR SAMPLE

C43 – TEST CELL #43

CR2 – COMPRESSOR ROOM SECOND FLOOR

NOTES:

1. SAMPLING LOCATIONS ARE APPROXIMATE.
2. ng/m³ – NANOGRAMS PER CUBIC METER
3. TOTAL PCBs – THE SUM OF AROCLORS 1016 THROUGH 1268.

GE-AVIATION
CINCINNATI, OHIO
AIR TEST SUMMARY REPORT

DATA SUMMARY - PCB RESULTS AMBIENT PCB AIR MONITORING

ARCADIS

FIGURE
1

ARCADIS

Attachment 1

GC #: **GC-20 8082 High Level Hydrogen**
Method: **Method 3**
Column: **Front ZB-1MS 20m .18 .18**
Middle ZB-5 20m .18 .18
Date: 2/15/2013
Analyst: MCA
File Name: C:\Documents and Settings\qcarnahan\Local Settings\Temporary Internet Files\Content.Outlook\4WSEMSSD\[GC20_Parameters_1.xls]8082 HL H2

Sample Delivery: SEE LEAP PARAMETERS

Column Oven:

Step	Temp (°C)	Rate (°C/min)	Hold (min)	Total (min)
Initial	150	-------	1.41	1.41
1	290	17.5	0.65	10.06

Stabilization Time (min): 0.5

Injector: Front CP-1177

1177 Oven Power: ON
1177 Temperature (°C) 300

Time	Split State	Split Ratio
Initial	ON	35

Flow/PSI(Front EFC, Type 1):

Step	Pres (psi)	Rate (psi/min)	Hold (min)	Total (min)
Initial	*24.8**	-------	10	10

Constant Flow Mode Enable: NO
Column Flow Rate (ml/min): 1.5

Injector: Middle CP-1177

1177 Oven Power: ON
1177 Temperature (°C) 300

Time	Split State	Split Ratio
Initial	ON	30

Flow/PSI(Front EFC, Type 1):

Step	Pres (psi)	Rate (psi/min)	Hold (min)	Total (min)
Initial	*29*	-------	10	10

Constant Flow Mode Enable: NO
Column Flow Rate (ml/min): 1.5

Detector: **Front ECD**

ECD Oven Power: ON
Temperature (°C) 300
Electronics: ON
Range: 1

Time	Range	Autozero
Initial	1	YES

Front ECD Adjustment
Time Constant: Fast
Cell Current: CAP
Contact Potential (mV):
Date of last adjustment

Front ECD Adjustments
Make-up Flow (mL/min) 35

Middle ECD

ECD Oven Power: ON
Temperature (°C) 300
Electronics: ON
Range: 1

Time	Range	Autozero
Initial	1	YES

Fast
CAP

Middle ECD Adjustments
35

Analog Output

Detectors: Front: ECD
Middle: ECD
Rear: None

*values may change with use

Time	Signal Source	Attenuation
Initial	Front Detector	1
Time	Signal Source	Attenuation
Initial	Middle Detector	1
Time	Signal Source	Attenuation
Initial	Rear Detector	1

r

Valve Table:

Time	1 None	2 None	3 None	4 None	5 None	6 None	7 None
Initial	-----	-----	-----	-----	-----	-----	-----

Initial valve state=Off